VERSION 2

MAY 07, 2018

OPEN ACCESS

DOI:
dx.doi.org/10.17504/protocols.io.pysdpwe

Protocol Citation: William Chamorro, Diego Marin-Armijos, Fernando Z. Vaz-De-Mello, Angélico Asenjo 2018. Catalog, nomenclatural acts and distribution of Scarabaeinae (Coleoptera, Scarabaeidae) from Ecuador. **protocols.io**
<https://dx.doi.org/10.17504/protocols.io.pysdpwe>

MANUSCRIPT CITATION:

Agassiz JLR (1846) Nomenclatoris zoologici index universalis, continens nomina systematica classium, ordinum, familiarum et generum animalium omnium, tam viventium quam fossilium, secundum ordinem alphabeticum unicum deposita, adjectis homonymis platarum, nec non variis adnotationibus et emendationibus. Jent and Gassman, Solothurn [Soloduri], Switzerland, 1133 pp.
 Arias-Buritica JA, Medina CA (2014) Tres nuevas especies de *Cryptocanthon* Balthasar, 1942 para Colombia. *Caldasia* 36(1): 165–180.
 Arias-Buritica JA, Vaz-De-Mello FZ (2013) *Dichotomius*

Catalog, nomenclatural acts and distribution of Scarabaeinae (Coleoptera, Scarabaeidae) from Ecuador V.2

William Chamorro¹, Diego Marin-Armijos²,
 Fernando Z. Vaz-De-Mello³, Angélico Asenjo³

¹Universidad Particular de Loja, Investigador Asociado;

²Universidad Particular de Loja; ³Universidade Federal de Mato Grosso

William Chamorro

ABSTRACT

The Ecuadorian territory is divided into four natural regions: the coastal lowlands, the Andean highlands, the Amazon basin and the Galapagos Islands. Each of these regions has its own ecosystems and specific vegetation. The purpose of this work is to compile an updated catalog of the Scarabaeinae (Coleoptera: Scarabaeidae) of Ecuador that includes distributional data and several nomenclatural acts. We compiled data from 26 scientific collections, with the examination of 13,550 scarabaeines; additionally, 375 bibliographic references were reviewed for their taxonomic histories. The Scarabaeinae fauna from Ecuador contains 33 genera and 219 species, with 45 range-restricted (endemic) species and eight records erroneously attributed. The following nomenclatural acts are made: **new status as valid species** (3): *Canthon* (*Glaphyrocanthon*) *ohausi* Balthasar, 1939 **stat. n.**; *Deltochilum* (*Calhyboma*) *arrowi* Paulian, 1939 **stat. n.**; and *Dichotomius* (*Dichotomius*) *angustus* (Luederwaldt, 1923) **stat. n.** **New synonyms** (4): *Deltochilum* (*Deltohyboma*) *aureopilosum* Paulian, 1938 **syn. n.**; *Dichotomius* (*Dichotomius*) *provisorius* Luederwaldt, 1925 **syn. n.**; *Dichotomius* (*Dichotomius*) *hempeli* Pereira, 1942 **syn. n.**; and *Uroxys magnus* Balthasar, 1940 **syn. n.** **Revalidated names** (4): *Canthidium* (*Canthidium*) *orbiculatum* (Lucas, 1859); *Coprophanaeus* (*Coprophanaeus*) *florenti* Arnaud, 2002; *Dichotomius* (*Luederwaldtinia*) *fortepunctatus* (Luederwaldt, 1923) and *Phanaeus* (*Notiophanaeus*) *pyrois funereus* Balthasar, 1939. **Revised status** (1): *Canthon* (*Glaphyrocanthon*) *subhyalinoides* Balthasar, 1939. **New combination** (1): *Uroxys ohausi* (Balthasar, 1938) **comb. n.** **Lectotype designations** (69): *Choeridium aeneomicans* Harold, 1868; *Choeridium connexum* Harold, 1868; *Choeridium ecuadorens* Boucomont, 1928; *Canthidium aurifex* Bates 1887; *Canthidium centrale* Boucomont, 1928; *Canthidium coerulescens* Balthasar, 1939; *Canthidium inoptatum* Balthasar, 1939; *Canthidium lentum* Erichson, 1847; *Onthophagus onitoides* Perty, 1830; *Choeridium orbiculatum* Lucas, 1859; *Canthidium rufinum* Harold, 1867; *Deltochilum aberrans* Harold, 1868; *Canthon angustatus* Harold, 1867; *Canthon balteatus* Boheman, 1858; *Canthon balteatus* var. *lojanus* Balthasar, 1939; *Canthon*

Ribeiroi (Pereira, 1954) (Coleoptera: Scarabaeidae: Scarabaeinae): redescrípción y anotaciones taxonómicas de la especie. *Caldasia* 35(1): 209–217.

Arnaud P (1982a) Liste des types de Phanaeini du *Muséum national d'Histoire naturelle* de Paris. *Revue Française d'Entomologie* 4(3): 113–118.

Arnaud P (1982b) Description de deux nouvelles especes de Phanaeini (Col: Scarabaeidae). *Miscellanea entomologica* 49.

Arnaud P (1996) Description d'une nouvelle espèce de *Coprophanaeus* du Brésil. *Besoiro* 2: 6–7.

Arnaud P (1997) Description de nouvelles espèces du genre *Coprophanaeus* Ols. *Besoiro* 4: 4–8.

Arnaud P (2000) Description de nouvelles espèces de Phanaeides. *Besoiro* 5: 6–8.

Arnaud P (2002a) Les Coléoptères du Monde, Vol. 28. Phanaeini.

Dendropaemon, *Tetramereia*, *Homalotarsus*, *Megatharsis*, *Diabroctis*, *Coprophanaeus*, *Oxysternon*, *Phanaeus*, *Sulcophanaeus*. Hillside Books, Canterbury, England, 151 pp.

Arnaud P (2002b) Descriptions d'espèces nouvelles dans les genres *Coprophanaeus*, *Phanaeus* et *Sulcophanaeus*. *Besoiro* 7: 2–9.

Arnaud P (2002c) Descriptions d'espèces nouvelles dans les genres *Coprophanaeus*, *Phanaeus* et *Sulcophanaeus*. Désignation de Lectotypes et Néotypes. *Besoiro* 8: 2–5.

Arnaud P (2004) Commentaires et mise au poi

delicatulus Balthasar, 1939; *Canthon fuscipes* Erichson, 1847; *Canthon gemellatus* Erichson, 1847; *Canthon luteicollis* Erichson, 1847; *Canthon nitidicollis* Lucas, 1859; *Canthon angustatus ohausi* Balthasar, 1939; *Canthon plagiatus* Harold, 1880; *Canthon politus* Harold, 1868; *Ateuchus bidens* Fabricius, 1801; *Canthon semiopacus* Harold, 1868; *Canthon subhyalinus* Harold, 1867; *Canthon subhyalinoides* Balthasar, 1939; *Hyboma aequinotiale* Buquet, 1844; *Deltochilum erodioides* Harold, 1867; *Deltochilum tessellatum* var. *arrowi* Paulian, 1939; *Deltochilum barbipes* Bates, 1870; *Deltochilum aureopilosum* Paulian, 1938; *Deltochilum batesi* Paulian, 1938; *Hyboma dromedarius* Castelnau, 1840; *Hyboma hyppona* Buquet, 1844; *Hyboma arrogans* Buquet, 1844; *Deltochilum mexicanum* Burmeister, 1848; *Deltochilum orbiculare* Lansberge, 1874; *Deltochilum tessellatum* Bates, 1870; *Pinotus satanas* var. *angustus* Luederwaldt, 1923; *Pinotus provisorius* Luederwaldt, 1925; *Pinotus compressicollis* Luederwaldt, 1929; *Copris scalpellum* Taschenberg, 1870; *Pinotus abnormis* Luederwaldt, 1923; *Pinotus divergens* Luederwaldt, 1923; *Pinotus fortepunctatus* Luederwaldt, 1923; *Pinotus monstrosus* Harold, 1875; *Pinotus podalirius* Felsche, 1901; *Pinotus problematicus* Luederwaldt, 1923; *Pinotus hempeli* Pereira, 1942; *Pinotus protectus* Harold, 1867; *Pinotus protectus* var. *tridentatus* Luederwaldt, 1923; *Pinotus quinquedens* Felsche, 1910; *Pinotus quinquelobatus* Felsche, 1901; *Pinotus achamas* Harold, 1867; *Onthophagus dicranoides* Balthasar, 1939; *Onthophagus digitifer* Boucomont, 1932; *Onthophagus lojanus* Balthasar, 1939; *Onthophagus xanthomerus* Bates, 1887; *Phanaeus achilles* Boheman, 1858; *Canthon kaestneri* Balthasar, 1939; *Canthon moniliatus* Bates, 1887; *Uroxys elongatus* Harold, 1868; *Uroxys latesulcatus* Bates, 1891; *Uroxys magnus* Balthasar, 1940; *Pseuduroxys ohausi* Balthasar, 1938; *Uroxys pauliani* Balthasar, 1940; *Uroxys rugatus* Boucumont, 1928 and *Uroxys sulcicollis* Harold, 1880. Maps of geographical distribution of each species are provided.

License: This is an open access protocol distributed under the terms of the [Creative Commons Attribution License](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Protocol status: In development
We are still developing and optimizing this protocol

Created: May 07, 2018

Last Modified: May 07, 2018

PROTOCOL integer ID: 12018

Keywords: dung beetle, endemic species, maps, taxonomic historic, type specimens.

1

2